

4/8/2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicant : M. Dewayne Adams  
Martin Heyman  
Garth Gibby  
Matthew Rhoades  
Mark Olson

For : "Ergonomic Hand Held Display Device"

Attorney Docket No.: X0201A

Filed : March 6, 2002

Serial No. : \_\_\_\_\_

XIP No. : 118

Art Unit/Examiner : \_\_\_\_\_

Honorable Commissioner of Patents and Trademarks  
Washington, DC 20231

Petition to Make Special Under MPEP 708.02 VIII

Sir,

Xybernaut Corporation, owner and assignee of all right, title, and interest in the above application, Attorney Docket No. XIP 118, as your petitioner, respectfully requests that the above-entitled application be made "Special" so that said application may be given an immediate action on the merits. This application has not received any action by the Office on the Merits. The claims as presented are directed toward a single invention; however, if the Office determines that all the claims presented are not obviously directed to a single invention, then an election without traverse will be made. A pre-examination search has been conducted in the United States classes 345/123, 364/708, 361/680, 33/443, 345/156, 364/708, non-patented publications, and in the foreign patent databases.

The most relevant art is discussed below as well as how the claimed invention distinguishes from this art. A copy of the most relevant prior art is enclosed herewith.

U.S. 5,305,244 (Newman I) which discloses a voice-activated, user-supported computer (mobile computer) and U.S. 5,844,824 (Newman II) which discloses a body-worn, hands-free computer system that does not rely upon keyboard input or activation apparatus. The computers taught in Newman I and II are typically contained within a single housing which usually connected to an external display. All other essential non-redundant computer components are contained within the single enclosure. A connector port is usually disposed on at least one face of the enclosure with various connectors for external input and output devices. The computer casing is also designed with attachment means such as belt loop bracket or clip so that the casing may be easily attached to the body of a user or otherwise supported by a user. Neither Newman I nor II discloses an ergonomic hand held flat panel display device comprising *"a primary handgrip and a secondary hand grip on said display housing wherein said primary hand grip and said secondary handgrip are disposed on opposing sides of said housing and both of said handgrips further angled inward towards the back of the display device,"* as taught in claims 1, 8, 14, 22, 26 and 34 of the instant application.

Also disclosing wearable computers are U.S. Patent Nos. 5,285,398 (Janik I), 5,491,651 (Janik II), 5,581,492 (Janik III), 5,798,907 (Janik IV), 5,555,490 (Carroll I) and 5,572,401 (Carroll II). Each Janik patent discloses a belt computer containing the elements or components of a computer. For example, in Janik I, the plurality of computing elements are located on the belt and a flexible signal relaying means connects all of the elements for computing. A protective covering is used for enclosing said

computer elements. In Janik II, a similar belt computer is described and claimed in which the signal relaying means, the length of which between any two computing elements, is greater than the length of the wearable member between any two computing elements. In each Janik patent, the flexible wearable computer is in the form of a relatively heavy belt comprising around its periphery sequentially positioned computer elements.

Both Carroll I and Carroll II disclose a wearable support and interconnection structure for a modular microcomputer system having a plurality of microcomputer cards housed in a plurality of microcomputer card pockets in a wearable garment. Examples of such garments include a pliable garment worn over the torso of the user (vest), a cap that fits snugly on user's head or in the form of a belt. In one embodiment, the pockets are linked by a plurality of channels extending from pocket to pocket that secure an electronic linking system to the wearable garment. The linking system includes a plurality of flat flexible cables encasing flexible circuitry and microcomputer card connectors. A card connector opens into each pocket to receive a microcomputer card. Each connector is operable, coupled to the cables such that when microcomputer cards are placed in the connectors and provided with power, an operational microcomputer system is created.

Neither Janik I nor II discloses an ergonomic hand held flat panel display device comprising *"a primary handgrip and a secondary hand grip on said display housing wherein said primary hand grip and said secondary handgrip are disposed on opposing sides of said housing and both of said handgrips further angled inward towards the back of the display device,"* as taught in claims 1, 8, 14, 22, 26 and 34 of the instant application.

Also known in the prior art are pen tablet style computers, which are keyboardless flat panel screens with integral computer hardware and power supply. Such computers are for use by mobile workers and typically are activated by a pen stylus, voice, external mouse, or other activation device. Lucente et al., U.S. 5,432,720 (herein after Lucente) teaches such a pen based computer. The system of Lucente includes a housing and integral flat panel display. It further includes a switch which enables left handed and right handed use as well as portrait and landscape viewing perspectives. The switch allows the use to re-orient the output on the display screen such that it is always vertically oriented to the vertical midline plane of the user's body. Lucente does not disclose an ergonomic hand held flat panel display device comprising *"a primary handgrip and a secondary hand grip on said display housing wherein said primary hand grip and said secondary handgrip are disposed on opposing sides of said housing and both of said handgrips further angled inward towards the back of the display device,"* as taught in claims 1, 8, 14, 22, 26 and 34 of the instant application.

Still further known in the prior art are tablet style computers that are designed for both desktop and hand-held use. Engstrom et al, U.S. 4,611,406 (hereinafter Engstrom) teaches such a multi-purpose tablet style device. The device of Engstrom, a graphics tablet input device, has a switching function for right and left-hand use by an operator. It also contains features such as a stylus that is removably storable within the case, elevation adjustment means by which an operator may adjust the angular attitude of the case with respect to a work surface. Another feature of Engstrom is the provision of gripping means on the underside of the case to facilitate hand-held operation of the graphic input tablet by an operator. Therefore Engstrom may alternatively be used as a hand-

held device or as a desktop device with means for adjusting the viewing angle. However, except for the provision of handgrips, Engstrom fails to teach any features that truly make the device more comfortable for the user to use. Engstrom does not disclose an ergonomic hand held flat panel display device comprising *"a primary handgrip and a secondary hand grip on said display housing wherein said primary hand grip and said secondary handgrip are disposed on opposing sides of said housing and both of said handgrips further angled inward towards the back of the display device,"* as taught in claims 1, 8, 14, 22, 26 and 34 of the instant application.

Another ergonomic display type known in the prior art is that of Kato et al, U.S.6,297,795 (hereinafter Kato). Kato teaches a hand held information processing apparatus having an integral display screen and adapted to be held in the hand of a user and for displaying data in a portrait or landscape mode. The hand held device has a rotary switch disposed on one corner, at a position natural to be accessed by a person's thumb while holding the device. Rotation of the rotary switch permits the change of perspective from portrait to landscape and from left-handed to right-handed use. However, the design of the apparatus of Kato is a miniature screen such that the entire device fits in a single hand such as the PALM PILOT device manufactured and sold by Palm Corporation of Santa Clara, California. Kato does not disclose an ergonomic hand held flat panel display device comprising *"a primary handgrip and a secondary hand grip on said display housing wherein said primary hand grip and said secondary handgrip are disposed on opposing sides of said housing and both of said handgrips further angled inward towards the back of the display device,"* as taught in claims 1, 8, 14, 22, 26 and 34 of the instant application.

Kim, U.S. 6,304,431 teaches a detachable display for a portable computer. The portable computer system of Kim includes a hinge system and video cable that allows the display to be offset from the computer while the computer is resting on a surface. When the user is finished the hinges are retracted and the computer is closed like a clamshell. Kim does not disclose an ergonomic hand held flat panel display device comprising "*a primary handgrip and a secondary hand grip on said display housing wherein said primary hand grip and said secondary handgrip are disposed on opposing sides of said housing and both of said handgrips further angled inward towards the back of the display device,*" as taught in claims 1, 8, 14, 22, 26 and 34 of the instant application.

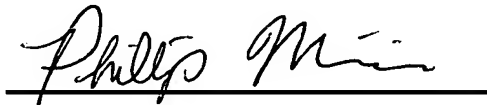
Fujitsu Corporation of Japan is now marketing a pen tablet style computer under the trade name STYLISTIC. The device is a full functional computer comprised of a flat panel display screen which uses a pen-like stylus for input and activation. The device can be held in a user's hand or rested on a flat surface while being used. However, the Fujitsu device does not disclose an ergonomic hand held flat panel display device comprising "*a primary handgrip and a secondary hand grip on said display housing wherein said primary hand grip and said secondary handgrip are disposed on opposing sides of said housing and both of said handgrips further angled inward towards the back of the display device,*" as taught in claims 1, 8, 14, 22, 26 and 34 of the instant application.

Panasonic Corporation of Japan is now marketing a Mobile Data Wireless Display for use with its TOUGHBOOK series of notebook computers. The display is carried in the hand or holstered on a belt and allows a touch screen display pad to communicate wirelessly with a computer at distances of up to 300 feet. However, the

display of Panasonic does disclose an ergonomic hand held flat panel display device comprising *"a primary handgrip and a secondary hand grip on said display housing wherein said primary hand grip and said secondary handgrip are disposed on opposing sides of said housing and both of said handgrips further angled inward towards the back of the display device,"* as taught in claims 1, 8, 14, 22, 26 and 34 of the instant application.

Your petitioner therefore believes that an examination of S/N UNKNOWN will show all of the claims to be allowable and therefore for the reasons set out here respectfully petitions that an order be issued directing the above application S/N UNKNOWN be made "Special."

Respectfully Submitted,

A handwritten signature in cursive script, reading "Phillip D. Mancini", is written over a solid horizontal line.

Phillip D. Mancini  
Agent for Applicant  
Reg. # 46,743  
Xybernaut Corporation  
12701 Fair Lakes Circle, Suite 550  
Fairfax, VA 22033

Date Mailed: March 6, 2002  
Certificate of Express Mail attached.